

***DETAILED ACTION***

This office action is in response to applicant amendment/remarks filed 3/19/2010.

Claims 1-2, 4-8, 10-22, 24-26 are pending, claims 3, 9, 23, and 25 are cancelled.

***Election Restrictions***

1. Claim 23 is withdrawn from further consideration pursuant to 37 CFR 1,142(b) as being drawn to a nonelected invention and there being no allowable generic or linking claim. Applicant's election without traverse of claims 1-2, 4-8, 10-22, 24-26 in the reply filed on 3/19/2010 is acknowledged.

***Examiner's Amendment***

2. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with **Edward J. Kessler, Reg. No. 25,688 on May 28, 2010**. The applicant representative, **Edward J. Kessler agreed to the following changes without prejudice**.

Amended independent claims 1 and 16 by adding the dependent claim 14 limitations to independent claims 1 and 16, cancelled claim 14, 24-26, amended claims, 2, 15, and

20. The changes are as follows:

**Independent claim 1:** added the limitations of dependent claim 14 at the end of claim 1, cancelled dependent claim 14, and **claim 1 is changed to:** “A method of configuring a multibeam satellite to enable remote monitoring of its transmissions, wherein the satellite transmits a signal in a first beam to a user terminal for receiving the signal, the method comprising configuring the satellite to transmit a copy of the signal in a second beam to a remote monitoring station for monitoring the copy, wherein the copy is transmitted in the second beam in a channel different from that used for user data transmission to user terminals in the second beam, and wherein the satellite additionally transmits one or more additional signals in one or more respective additional beams, and wherein the satellite is periodically reconfigured to select different ones of said signal and said one or more additional signals for transmitting a copy thereof in said second beam”.

**Independent claim 16:** added the limitations of dependent claim 14 at the end of claim 1, cancelled dependent claim 14, and **claim 16 is changed to:** “A method of monitoring a transmission of a signal by a multibeam satellite in a first beam, the method comprising receiving a copy of the signal in a second beam of the satellite and monitoring the copy of the signal, wherein the copy is received in the second beam in a channel different from that used for user data transmission to user terminals in the second beam, and wherein the satellite additionally transmits one or more additional signals in one or more respective additional beams, and wherein the satellite is periodically

reconfigured to select different ones of said signal and said one or more additional signals for transmitting a copy thereof in said second beam".

**Dependent claims 2 and 20;** in line 2, the phrase "*at a substantially lower gain than the signal*" changed to "*-- at a lower gain than the signal --*"

**Dependent claim 15;** in line 1, the phrase "*The method of claim 14*" changed to "*-- The method of claim 1 --*"

### ***Allowable Subject Matter***

3. **Claims 1-2, 4-8, 10-13, and 15-22** are allowed.

### ***Reasons for Allowance***

4. The following is an examiner's statement of reason for allowance:

None of the prior art of the record either singularly or in combination teaches or fairly suggests a multibeam transmitting duplicate of a channel from one spot beam in another spot beam that contains a remote monitoring station, the satellite is selects the channel which is duplicated that allows the beams of the satellite to be monitored without a remote monitoring station in each beam, and "wherein the satellite additionally transmits one or more additional signals in one or more respective additional beams, and wherein

the satellite is periodically reconfigured to select different ones of said signal and said one or more additional signals for transmitting a copy thereof in said second beam".

**Cited reference Jacomb-Hood** (*Jacomb-Hood et al., U.S. Publication No. 20030052819*) teaches a satellite communications and an interference cancellation for a multi-beam antenna to permit more capacity to be focused into high user density regions (e.g. *Fig. 1B, pg [4], lines 1-3*), and to improve signal to interference power ratio by creating composite transmit signals which contains a copy of the signal being transmitted and the "phase/amplitude settings of the phase/amplitude circuits are selected such that the copy is substantially equal in amplitude and opposite in phase to the interference signal received at the remote user resulting from the sidelobes of antenna beams pointing at other nearby remote users. So the copy and the interference signal cancel each other out at the remote user" (e.g., *pg [38], lines 4-16*).

**However, the reference does not** expressly teach the following underlined limitations:

"A method of configuring a multibeam satellite to enable remote monitoring of its transmissions, wherein the satellite transmits a signal in a first beam to a user terminal for receiving the signal, the method comprising configuring the satellite to transmit a copy of the signal in a second beam to a remote monitoring station for monitoring the copy, wherein the copy is transmitted in the second beam in a channel different from that used for user data transmission to user terminals in the second beam, and wherein the satellite additionally transmits one or more additional signals in one or more respective additional

beams, and wherein the satellite is periodically reconfigured to select different ones of said signal and said one or more additional signals for transmitting a copy thereof in said second beam” as disclosed in amended independent claim 1 (see above the Examiner Amendment).

“A method of monitoring a transmission of a signal by a multibeam satellite in a first beam, the method comprising receiving a copy of the signal in a second beam of the satellite and monitoring the copy of the signal, wherein the copy is received in the second beam in a channel different from that used for user data transmission to user terminals in the second beam, and wherein the satellite additionally transmits one or more additional signals in one or more respective additional beams, and wherein the satellite is periodically reconfigured to select different ones of said signal and said one or more additional signals for transmitting a copy thereof in said second beam” as disclosed in amended independent claim 16 (see above the Examiner Amendment).

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled “Comments on Statement of Reasons for Allowance”.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shaima Q. Aminzay whose telephone number is 571-272-7874. The examiner can normally be reached on 7:00 AM -4:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mathew D. Anderson can be reached on 571-272-4177. The fax number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/SHAIMA Q. AMINZAY/

Examiner, Art Unit 2618

May 29, 2010

/Matthew D. Anderson/

Supervisory Patent Examiner, Art Unit 2618